Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An optically controlled optical-path-switching-type data distribution apparatus for providing data from a data server device to one or more specific client devices selected from a plurality of client devices comprising:

a data server device, a data communication unit and a client device, wherein:

the data communication unit comprises:

an optical switch, an optical signal path, an optical signal transmitting unit, an optical signal receiving unit, and data transmission/receipt control unit;

the optical signal transmitting unit comprising a signal light beam light source for irradiating a signal light beam having one or more wavelengths, and a control light beam light source for irradiating a control light beam having one or more wavelengths that are different from those of the signal light beam;

the optical switch comprising:

one or more light absorbing layer films for transmitting the signal light beam and selectively absorbing respectively only one specific wavelength of the control light beams,

means for respectively converging and irradiating the control light beam and the signal light beam to each of the light absorbing layer films,

one or more thermal lens forming devices for causing the converged signal light beam to exit ~~while maintaining beam convergence or for varying the angle of divergence of the signal light beam and for causing the signal beam to exit, in response to the presence or absence of irradiation of the one specific wavelength of the control light beam~~ at an angle of divergence in response to the presence or absence of irradiation of the one specific wavelength of the control light beam, by using a thermal lens containing the light absorbing

layer films and based on a distribution of refractive index produced reversibly caused by temperature increase generated in an area of the light absorbing layer film that has absorbed the one specific wavelength of the control light beam and in the periphery thereof,

wherein when the one specific wavelength of the control light beam is irradiated and focused at a first portion of the thermal lens, the angle of divergence of the signal beam is greater than the angle of divergence of the signal beam when the one specific wavelength is absent, and when the one specific wavelength of the control light beam is irradiated and focused at a second portion of the thermal lens, the angle of divergence of the signal beam is smaller than the angle of divergence of the signal beam when the one specific wavelength is absent, and

one or more mirrors, each provided after one of the thermal lens forming devices and having a hole and reflecting means, for passing the signal light beam exiting the thermal lens forming devices through the hole or deflecting the optical path of the signal light beam by reflecting the signal light beam by the reflecting means in response to the presence or absence of irradiation of the one specific wavelength of the control light beam.

2. (Original) An optically controlled optical-path-switching-type data distribution apparatus of claim 1, wherein

the data communication unit irradiates and transmits an arbitrary size of digital information that has been split into optical packets, each containing a fixed length or variable length optical digital signals as the signal light beam, and

actuates the optical switch by irradiating an optical tag representing the identification information of a destination client device to each of the optical packets as the control light beam in synchronization with the irradiation of the optical packets.

3. (Currently Amended) An optically controlled optical-path-switching-type data distribution method comprising:

causing a signal light beam of one or more wavelengths carrying data converted to an optical signal, and a control light beam that is irradiated from a control light beam light source in response to a data transporting destination and has one or more wavelengths that are different from those of the signal light beam to travel substantially coaxial and in the same direction;

converging and irradiating respectively the control light beam and the signal light beam to each of one or more light absorbing layer films that transmit the signal light beam and that absorb selectively only one specific wavelength of the control light beam;

at each of one or more thermal lens forming devices each containing one or more of the light absorbing layer films, by using a thermal lens based on a distribution of refractive index produced reversibly caused by temperature increase generated in an area of the light absorbing layer film that has absorbed the one specific wavelength of the control light beam and in the periphery thereof and in response to the presence or absence of irradiation of the control light beam having the one specific wavelength, causing the converged signal light beam to exit maintaining the beam converged or to exit with the angle larger than the normal divergence angle or the normal divergence angle thereof,

wherein when the one specific wavelength of the control light beam is irradiated and focused at a first portion of the thermal lens, the angle of divergence of the signal beam is greater than the angle of divergence of the signal beam when the one specific wavelength is absent, and when the one specific wavelength of the control light beam is irradiated and focused at a second portion of the thermal lens, the angle of divergence of the signal beam is smaller than the angle of divergence of the signal beam when the one specific wavelength is absent;

using a hole-provided mirror having a reflecting surface, in response to the presence or absence of irradiation of the control light beam of the one specific wavelength, causing the signal light beam exited from the thermal lens forming device to travel straight through the hole or changing the optical paths thereof by reflecting the signal light beam at the reflecting surface;

distributing data from a data server device to one or more specific client devices selected among a plurality of client devices.

4. (Original) An optically controlled optical-path-switching-type data distribution method of claim 3, wherein

the signal light beam transports packets containing digital information of an arbitrary size that has been split into a pack of fixed length or of variable length digital signals as optical packets;

the control light beam is irradiated in synchronization with the irradiation of the optical packets as the optical tag representing the identification information on a destination client device for each optical packet, to effect changes in the optical paths of the optical packets.

5. (Original) An optically controlled optical-path-switching-type data distribution apparatus of claim 1, wherein

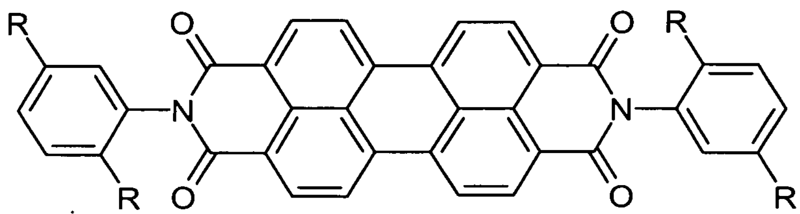
the signal light beam transports packets containing digital information of an arbitrary size that has been split into a pack of fixed length or variable length digital signals as optical packets;

the control light beam that is irradiated in synchronization with the irradiation of the optical packets as the optical tag representing the identification information on a destination client device for each optical packet, and that changes optical paths of the optical packets.

6. (Previously Presented) An optically controlled optical-path-switching-type data distribution apparatus of claim 1 wherein

the light absorbing layer film contains two (2) or more pigments selected from a group consisting of:

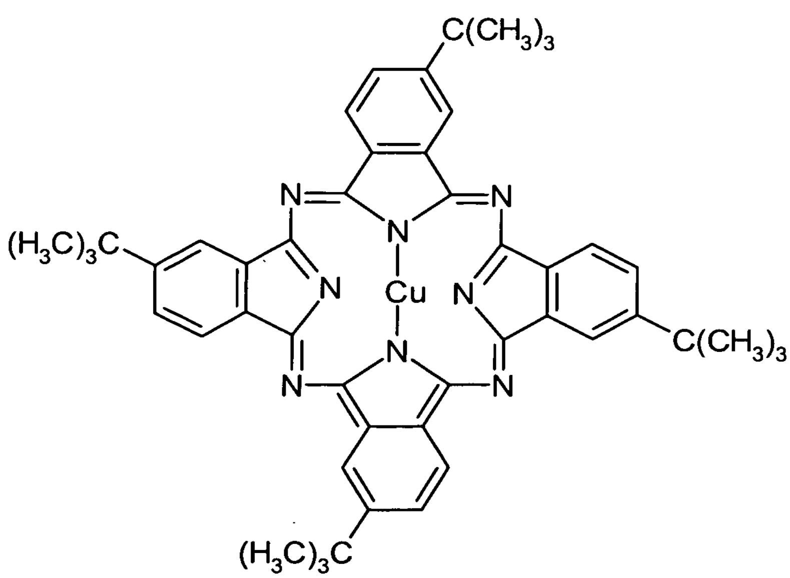
N, N'-bis(2, 5-di-*tert*-butylphenyl)-3, 4, 9, 10-perylenedicarboxyimide) [1],



...[1];

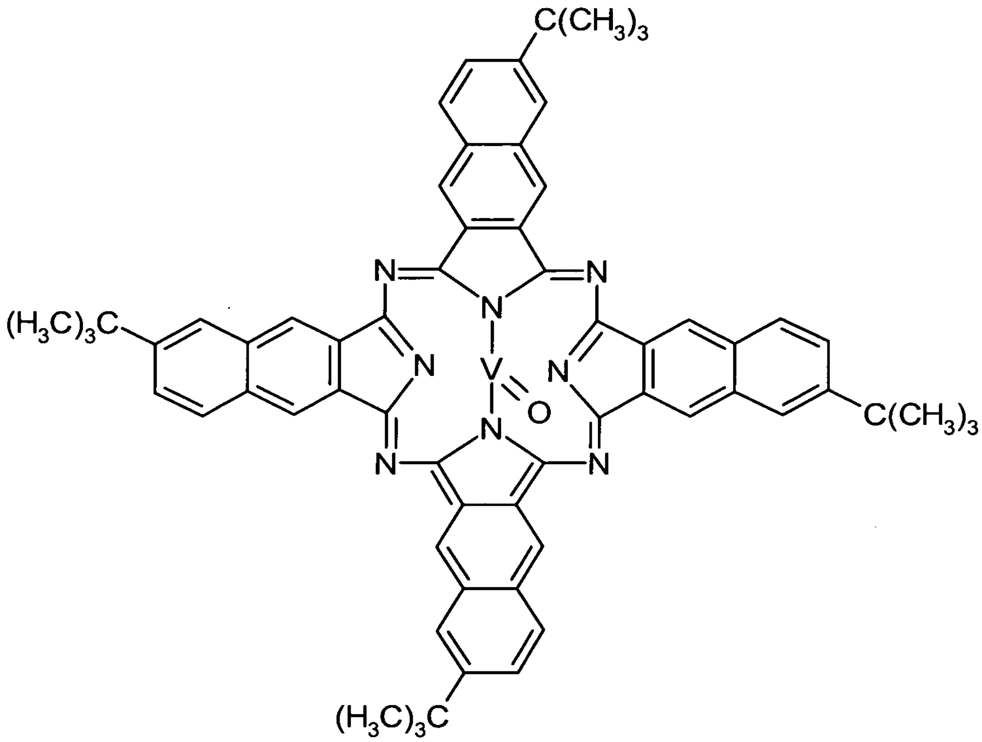
[R = $C(CH_3)_3$]

Copper(11)2, 9, 16, 23-tetra-*tert*-butyl-29H, 31H-phthalocyanine [2],



...[2]; and

Vanadyl 2, 11, 20, 29-tetra-*tert*-butyl-2, 3-naphthalocyanine [3],

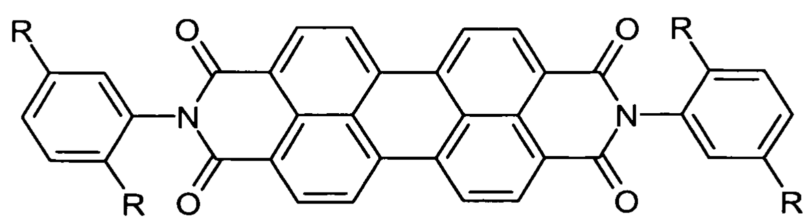


...[3].

7. (Previously Presented) An optically controlled optical-path-switching-type data distribution method of claim 3, wherein

the light absorbing layer film contains two (2) or more pigments selected from a group consisting of:

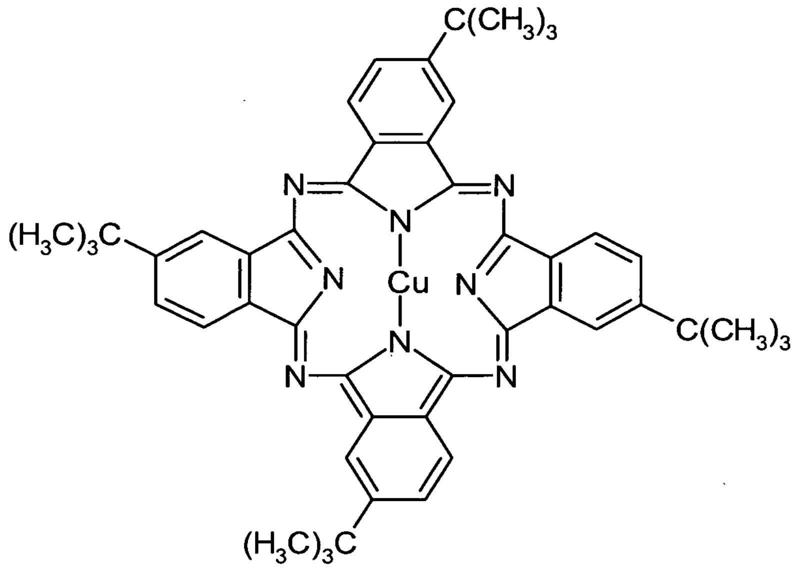
N, N'-bis(2, 5-di-*tert*-butylphenyl)-3, 4, 9, 10-perylenedicarboxyimide) [1],



...[1];

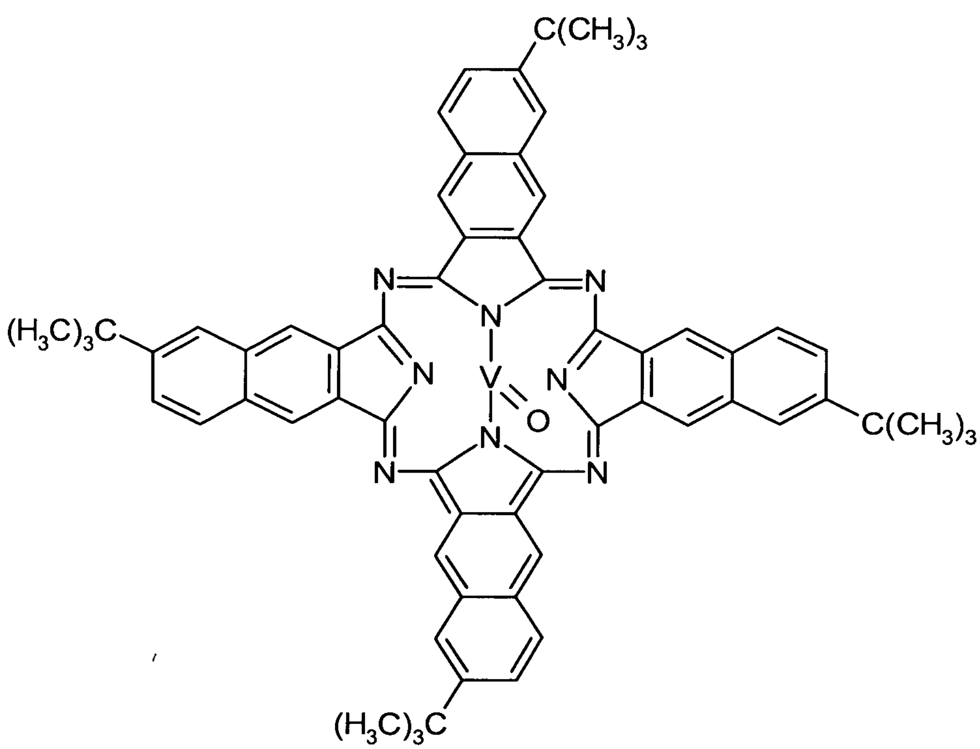
[R = $C(CH_3)_3$]

Copper(11)2, 9, 16, 23-tetra-*tert*-butyl-29H, 31H-phthalocyanine [2],



…[2]; and

Vanadyl 2, 11, 20, 29-tetra-*tert*-butyl-2, 3-naphthalocyanine [3],



…[3].

8. (Previously Presented) An optically controlled optical-path-switching-type data distribution apparatus of claim 1 wherein

a data server device distribute digital static image data or moving image data to one or more specific client devices selected among a plurality of client devices.

9. (Previously Presented) An optically controlled optical-path-switching-type data distribution method of claim 3 wherein

a data server device distribute digital static image data or moving image data for medical use to one or more specific client devices selected among a plurality of client devices.